

Interview Summary	Application No.	Applicant(s)
	10/700,801	GEISSLER, ALFRED
	Examiner Erica E Cadugan	Art Unit 3722

All participants (applicant, applicant's representative, PTO personnel):

(1) Erica E Cadugan. (3) _____.

(2) Jeffrey Lotspeich. (4) _____.

Date of Interview: 24 May 2005.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: 1-14.

Identification of prior art discussed: U.S. Pat. No. 5,533,846 to Geissler.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the attached proposed amendment. See Examiner's Amendment for agreed-upon changes.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

ATTACHMENT TO INTERVIEW SUMMARY

THE MAXHAM FIRM

A PROFESSIONAL LAW CORPORATION

LAWRENCE A. MAXHAM

BLAKE A. O'NEILL
JEFFREY J. LOTSPEICH

SYMPHONY TOWERS
750 "B" STREET, SUITE 3100
SAN DIEGO, CALIFORNIA 92101
U.S.A.
TELEPHONE (619) 233-9004
FACSIMILE (619) 544-1246
URL: <http://www.maxhamfirm.com>

PATENTS

TRADEMARKS

COPYRIGHTS

C-O-N-F-I-D-E-N-T-I-A-L

ATTORNEY/CLIENT PRIVILEGED COMMUNICATION

The information contained in this facsimile transmission is confidential. The information is intended only for the use of the individual or entity to whom it is addressed. If you are not the intended recipient or the employee or agent responsible for delivery to the intended recipient, you are hereby notified that any use, dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return this document to us by mail to 750 "B" Street, Suite 3100, San Diego, CA 92101.

(Please Call (619) 233-9004 If Received In Error)

DATE: May 23, 2005

TO: Examiner Erica E. Cadugan
Art Unit: 3722

COMPANY: USPTO

FAX NO.: 571-273-4474

FROM: Jeffrey J. Lotspeich (619-233-9004)

RE: "MACHINING UNIT FOR A PROGRAM-CONTROLLED
MILLING AND DRILLING MACHINE"
Inventor: Alfred Geissler et al.
Serial No.: 10/700,801 – Filed: 3 November 2003
Our File: 0250-130

NUMBER OF PAGES INCLUDING COVER SHEET: 10

If transmission is poor, or if you do not receive all pages, please call (619) 233-9004 as soon as possible.

COMMENTS:

Examiner Cadugan:

I look forward to your call on May 24, 2005, at 2:00 PM (eastern) to discuss the proposed amendment attached hereto.

Regards,

Jeff Lotspeich

"PATENTS"

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
ALFRED GEISSLER ET AL.) Group No: 3722
SERIAL NO.: 10/700,801)
FILED: 3 November 2003) Examiner: Erica E. Cadugan
FOR: MACHINING UNIT FOR A PROGRAM-)
CONTROLLED MILLING AND)
DRILLING MACHINE)

PROPOSED AMENDMENT NOT FOR ENTRY

Mail Stop: AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated 4 February 2005, the three-month period for response having been extended to 4 June 2005 by concurrent submission of a Petition and payment of fees, please amend the above-identified application as follows:

IN THE CLAIMS:

Please enter the following amended claims:

1. (Currently Amended) A machining unit for a program-controlled milling and drilling machine, said machining unit comprising:
 - a head support movable in at least one coordinate axis ~~several coordinate axes~~, said
 - support having a front portion ~~front face~~ and an axis of rotation pointing forward and downward by 45° relative to vertical;
 - a swivel head arranged on the front portion ~~front face~~ of the head support;
 - a spindle head ~~spindle nose~~ fixedly attached to the swivel head, said spindle head ~~spindle~~ nose further comprising a working spindle, said spindle head ~~spindle nose~~ being arranged at an axis at an angle of 45° relative to said axis of rotation of said head support;
 - 10 a spindle motor mounted in the head support, said motor having a shaft and being aligned coaxially with respect to said axis of rotation of said head support, and said motor having a shaft for rotating the ~~swivel head~~ about the axis of rotation of the head support; and
 - 12 a bevel gear arranged on a ~~on the~~ protruding end of the shaft,
 - 14 the swivel head further having a cylindrical hollow housing member coaxial with respect to the axis of rotation of the head support, and the head support having a housing neck in which
 - 16 the housing member of the swivel head is rotatably supported; and
 - 18 the head support further comprises a rotary drive for turning the swivel head around the axis of rotation of the head support together with the spindle motor.

2. (Currently Amended) The machining unit of claim 1, wherein the head

2 support further comprises a rotary drive for turning the swivel head, said rotary drive has a
having a clearance-free clamped gear train including a toothed belt drive and a pinion, said
4 pinion constantly engaging a spur ring mounted on the spindle motor.

3. (Original) The machining unit of claim 1, wherein a speed changing gear

2 arrangement is positioned downstream of the bevel gear.

4. (Original) The machining unit of claim 2, wherein a speed changing gear

2 arrangement is positioned downstream of the bevel gear.

5. (Currently Amended) The machining unit according to claim 1, wherein at

2 least one supporting ring is mounted in the cylindrical hollow housing neck of the head support,
and wherein said at least one supporting ring is supported in at least one peripheral groove
4 formed in the housing member of the swivel head.

6. (Currently Amended) The machining unit according to claim 4, wherein at

2 least one supporting ring is mounted in the cylindrical hollow housing neck of the head support,
and wherein said at least one supporting ring is supported in at least one peripheral groove
4 formed in the housing member of the swivel head.

7. (Currently Amended) The machining unit according to claim 1, wherein a
2 front half portion of a spindle the spindle motor housing is fixed by the housing member of the
swivel head and a rear portion of the spindle motor housing containing a spur the spur ring
4 projects into the head support.

8. (Currently Amended) The machining unit according to claim 5, wherein a
2 front half portion of a spindle the spindle motor housing is fixed by the housing member of the
swivel head and a rear portion of the spindle motor housing containing a spur the spur ring
4 projects into the head support.

9. (Currently Amended) The machining unit according to claim 6, wherein a
2 front half portion of a spindle the spindle motor housing is fixed by the housing member of the
swivel head and a rear portion of the spindle motor housing containing a spur the spur ring
4 projects into the head support.

10. (Currently Amended) The machining unit according to claim 1, wherein
2 the spindle head spindle nose has a box-like rear portion and wherein an external flexible pipe
adapted for protecting electrical and liquid lines extends from the head support to said box-like
4 rear portion.

11. (Currently Amended) The machining unit according to claim 10, wherein
2 the flexible pipe is connected to the head support via a rotating elbow connector and is pivotably
connected to the box-like rear portion portion of the spindle nose via an adapter.

12. (Original) The machining unit according to claim 11, wherein the adapter
2 contains a bushing having convex external surfaces against which a pivotable end ring abuts in a
sliding fit.

13. (Original) The machining unit according to claim 11, wherein rolling
2 elements are supported in the adapter.

14. (Original) The machining unit according to claim 12, wherein rolling
2 elements are supported in the adapter.

REMARKS

Claims 1-14 are all the claims pending in the Application.

Applicant notes with appreciation the Examiner's acknowledgement in the Office Action Summary of a claim for foreign priority under 35 U.S.C §§ 119, and that all of the certified copies of the priority documents have been received.

Applicant further acknowledges with appreciation that the inventorship of the Application has been changed to include Mr. Robert Jung, and the Application will be forwarded to OIPE for issuance of a corrected filing receipt.

Applicant acknowledges that the German patent publication referred to in the background portion of the specification was not considered by the Examiner. However, Applicant notes that this foreign publication corresponds to U.S. patent 5,533,846 to Geissler, which has been cited in the present Office Action. Applicant further notes that the '846 patent and the present Application have common inventors and are commonly assigned.

The drawings have been objected to as not showing every feature of the invention recited in claim 1. The foregoing amendment to claim 1 cancels several claim limitations, rendering the objection to those elements moot. With regard to the remaining claim elements, Applicant invites the Examiner's attention to FIG. 2, which depicts spindle motor 22, and bevel gear 28 arranged on the protruding end of the shaft 26. Applicant submits the drawings indeed show every feature of the claimed invention, and respectfully request that the objection to the drawings be withdrawn.

The specification has also been objected to as failing to provide proper antecedent basis for claimed subject matter. The foregoing clarifying amendments to the claims are believed fully responsive to the points raised by the Examiner. Accordingly, the withdrawal of the objection to the specification is respectfully requested.

Claims 1-14 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Claims 1 and 3 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Geissler (U.S. patent 5,533,846). Claim 10 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Geissler in view of Lecailtel et al. (U.S. patent 3,828,649). Applicant respectfully traverses these rejections, and requests reconsideration and allowance of the pending claims in view of the following arguments.

Rejection under 35 U.S.C. §112, second paragraph

The foregoing claim amendments are believed fully responsive to the points raised in the Office Action. On page 5 of the Action, the Examiner indicated that it is unclear as to what is meant by the term "rear" as recited in claims 10-14. Applicant respectfully invites the Examiner's attention to FIG. 1, which depicts swivel head 5 arranged on the *front portion* of head support 1, and box-like *rear portion* 8. Applicant submits that FIG. 1 therefore provides a suitable frame of reference for the "rear" term, and respectfully requests that the rejection under 35 U.S.C. §112, second paragraph, be withdrawn.

Rejection Under 35 U.S.C. §102(b)

Claim 1 is directed to a machining unit for a program-controlled milling and drilling machine, and specifically recites "the head support further comprises a rotary drive for turning the swivel head around the axis of rotation of the head support together with the spindle motor." Claim 1 has been amended to include the just-identified claim limitation. This limitation was one of several claim limitations presented in the originally filed dependent claim 2, which the Examiner indicated as allowable over the prior art. Applicant is not sure which claim limitation,

or limitations, the Examiner believed distinguished dependent claim 2 over the '846 patent.

Accordingly, Applicant provides the following comments with regard to this claim limitation as it applies to claim 1.

As shown in FIG. 3 of the '846 patent, drive motor 7 is mounted in support housing 1 in such a manner that drive motor 7 cannot be rotated in support housing 1 (the '846 patent at col. 3, lines 45-50). Simply put, drive motor 7 of the '846 patent is in a *fixed position* within housing 1. In contrast, the spindle motor of the invention of claim 1 is not fixed in position. Again, claim 1 recites "the head support [1] further comprises a rotary drive for *turning* the swivel head [5] around the axis of rotation [27] of the head support [1] *together with the spindle motor [22]*."

In view of the foregoing, the '846 patent fails to teach or suggest at least one feature recited in claim 1, and therefore this claim is believed to be patentable. Applicant further submits that dependent claim 3 is patentable at least by virtue of its dependence on patentable claim 1.

Rejection Under 35 U.S.C. §103(a)

The Examiner next rejects claim 10 under 35 U.S.C. § 103 (a) as being unpatentable over the '846 patent in view of Lecailtel. Applicant has demonstrated in the arguments above that the '846 patent relates to a milling and drilling machine that include motor 7, which is described as being in a *fixed position* within housing 1, and clearly does not teach or suggest Applicant's "*non-fixed position* spindle motor" as recited in claim 1. Applicant further submits that Lecailtel does not supply any of the deficiencies of the '846 patent. Therefore, the '846 patent, whether combined with or modified by Lecailtel, does not teach or render obvious the Applicant's invention as recited in claim 10, which depends from claim 1. Thus, claim 10 is also believed to be patentable.

Applicant notes with appreciation that claims 2-9, and 11-14 have been deemed allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph, and if rewritten in independent form. Although the foregoing claim amendments are believed to overcome the rejection under 35 U.S.C. § 112, second paragraph, Applicant respectfully declines this offer to rewrite these claims in view of the arguments presented herein.

Lastly, Applicant acknowledges the other references made of record in the accompanying form PTO-892 and not relied upon in the Office Action. They are interesting and appear to be generally related technology, but there is nothing of sufficient relevance to require detailed discussion.

CONCLUSION

Applicant believes that the Examiner's rejections have been overcome and submits that the subject application is in condition for allowance. Should any issues remain unresolved, Examiner Cadugan is invited to telephone the undersigned attorney.

Respectfully submitted,

ALFRED GEISSLER

PROPOSED AMENDMENT NOT FOR ENTRY

By: Lawrence A. Maxham
Attorney for Applicant
Registration No. 24,483

Dated: ____ May 2005

THE MAXHAM FIRM
750 'B' STREET, SUITE 3100
SAN DIEGO, CALIFORNIA 92101
TELEPHONE: (619) 233-9004
FACSIMILE: (619) 544-1246